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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/802,338 | 03/18/2004 | Mark Vincent Loen | | 3747 |

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EXAMINER

SMITH, RICHARD A

ART UNIT PAPER NUMBER

2859

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/802,338

Applicant(s)

MARK VINCENT LOEN

Examiner

R. Alexander Smith

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 1-5, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 6, 7 and 10-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040318.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the counter-bores of claim 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because the abstract needs to be in single paragraph form. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. 6,763,597 to Lysen

Lysen discloses the limitations of claims 1, 8 and 9 when the two surfaces are as shown in figure 1, the two measuring points of the first frame 10 are D1 and D3, the two measuring points of the second frame 12 are L1 and L3, the sensors being duo-lateral detectors and the alignment to the first and second surfaces is by the attachment means as discussed in column 2, lines 61-65.

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With respect to claim 9 and the measuring points being represented by small geometric shapes, in a broad sense, this is met by the lasers being round and the detectors being square as shown in figure 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen in view of U.S. 5,075,980 to Kerman.

Lysen teaches all that is claimed as discussed in the above rejections of claims 1, 8 and 9 except for the limitations of claims 2-5.

Kerman discloses that correction of parallel orientation, angular and offset errors are important as disclosed starting at column 2, line 63 and discloses correction of the various misalignment problems. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method, taught by Lysen, to determine the non-parallel orientation, the angular orientation and the relative offset, as suggested by Kerman, in order to

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correct alignment problems that can affect the intended function(s) of the first and second surfaces.

With respect to the angular orientation being referenced to a specific line as claimed in claims 4 and 5: The use of a particular type of reference point or line, as claimed by Applicant, is considered to be nothing more than the use of one of numerous and well known alternate reference points or lines that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to correctly adjustment alignment for parallel, angular and offset errors, as already suggested by Lysen and by Kerman.

7. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen in view of U.S. 6,628,378 to Marangoni et al.

Lysen teaches all that is claimed as discussed in the above rejections of claims 1, 8 and 9 except for the limitations of claims 2-5.

Marangoni et al. discloses that correction of parallel orientation, angular and offset errors are important as disclosed in figures 1 and 2 and the associated text and discloses correction of the various misalignment problems. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method, taught by Lysen, to determine the non-parallel orientation, the angular orientation and the relative offset, as suggested by Marangoni et al., in order to correct alignment problems that can affect the intended function(s) of the first and second surfaces.

With respect to the angular orientation being referenced to a specific line as claimed in claims 4 and 5: The use of a particular type of reference point or line, as claimed by Applicant,

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is considered to be nothing more than the use of one of numerous and well known alternate reference points or lines that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to correctly adjustment alignment for parallel, angular and offset errors, as already suggested by Lysen and by Marangoni et al.

Allowable Subject Matter

8. Claims 6, 7 and 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

9. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

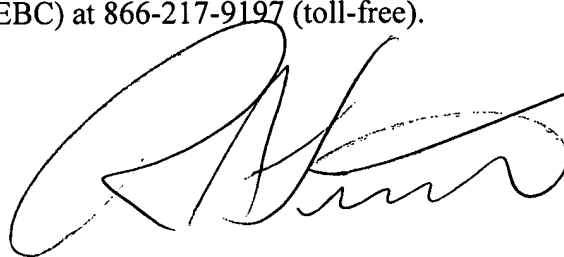
10. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related methods.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'R. Alexander Smith', with a long horizontal flourish extending to the right.

R. Alexander Smith
Patent Examiner
Technology Center 2800

RAS
March 7, 2005